

WHAT IS CLAIMED IS:

- 1        1. An apparatus for coupling ends of a first hose and a second hose,  
2 comprising:
  - 3                a male coupler configured to attach to the first hose;
  - 4                a female coupler having an inner cavity and being configured to attach to  
5 the second hose in the inner cavity by way of a first ferrule assembly, the first ferrule  
6 assembly comprising:
    - 7                an outer ferrule positionable on an outside surface of the second
    - 8 hose proximate a first end of the second hose;
    - 9                an inner ferrule positionable on an inside surface of the second
    - 10          hose and configured to rotatably couple with the female coupler so that the inner ferrule
    - 11          may swivel relative to the female coupler thereby enabling the female coupler to be
    - 12          swiveled about the second hose without rotating the second hose;
    - 13                wherein the male coupler and the female coupler are configured to couple
    - 14          to each other.
- 1        2. The apparatus of Claim 1, wherein the inner ferrule is coupled to the  
2 female coupler by folding a portion of the inner ferrule over a ridge located in the inner  
3 cavity of the female coupler in a manner that allows the inner ferrule to swivel within the  
4 female coupler about the ridge.
- 1        3. The apparatus of Claim 2, further comprising an o-ring located in a groove  
2 of the inner cavity of the female coupler to provide a seal between the outer ferrule, the  
3 inner ferrule, and the inner cavity of the female coupler.
- 1        4. The apparatus of Claim 1, wherein the male coupler comprises an external  
2 threaded portion configured to be threadably received within internal threads of the  
3 female coupler.

1       5.     The apparatus of Claim 4, wherein the male coupler has an inner cavity  
2 and is configured to attach to the first hose in the inner cavity by way of a second ferrule  
3 assembly, the second ferrule assembly comprising:

4                 an outer ferrule positionable on an outside surface of the first hose  
5 proximate a first end of the first hose;

6                 an inner ferrule positionable on an inside surface of the first hose and  
7 configured to couple with the outer ferrule proximate the first end of the first hose.

1       6.     The apparatus of Claim 5, wherein the outer ferrule of the male coupler  
2 comprises undulations to couple the outer ferrule of the male coupler to the first hose.

1       7.     The apparatus of Claim 6, wherein the inner ferrule of the male coupler  
2 comprises undulations to couple the inner ferrule of the male coupler to the first hose.

1       8.     The apparatus of Claim 7, wherein the second ferrule assembly does not  
2 swivel with respect to the male coupler.

1       9.     The apparatus of Claim 1, wherein the outer ferrule of the female coupler  
2 comprises undulations to couple the outer ferrule of the female coupler to the second  
3 hose.

1       10.    The apparatus of Claim 1, wherein the female coupler comprises an  
2 ergonomic grip for swiveling the female coupler about the second hose.

1       11.    The apparatus of Claim 10, wherein the female coupler comprises a  
2 handle.

1       12.    The apparatus of Claim 11, wherein the handle of the female coupler has a  
2 length greater than a cross-dimension of the handle.

1       13.    The apparatus of Claim 1, wherein the male coupler comprises an  
2 ergonomic grip.

1           14. The apparatus of Claim 13, wherein the ergonomic grip of the male  
2       coupler comprises a handle.

1           15. The apparatus of Claim 1, wherein the female coupler comprises a housing  
2       having a handle.

1           16. The apparatus of Claim 1, wherein the male coupler is coupled to the first  
2       hose and the female coupler is coupled to the second hose.

1           17. The apparatus of Claim 16, wherein tools are not required to couple the  
2       first hose to the second hose by way of the female coupler and the male coupler.

1           18. The apparatus of Claim 1, wherein the male coupler and the female  
2       coupler are made from plastic.

1           19. The apparatus of Claim 1, wherein the male coupler and the female  
2       coupler are made from metal.

1           20. The apparatus of Claim 1, wherein the male coupler is coupled to a first  
2       end of a hose and the female coupler is coupled to a second end of the hose.

1        21. An apparatus for coupling a first hose to a second hose, comprising:  
2            a male coupler configured to attach to the first hose;  
3            a female coupler having an inner cavity and being configured to attach to  
4        the second hose in the inner cavity by way of a first ferrule assembly, the first ferrule  
5        assembly comprising:  
6                    an outer ferrule positionable on an outside surface of the second  
7        hose proximate a first end of the second hose;  
8                    an inner ferrule positionable on an inside surface of the second  
9        hose and configured to rotatably couple with the female coupler so that the inner ferrule  
10      may swivel relative to the female coupler thereby enabling the female coupler to be  
11      swiveled about the second hose without rotating the second hose; and  
12                    an o-ring, wherein the inner cavity of the female coupler is configured to  
13      receive the o-ring to provide a seal between the outer ferrule, the inner ferrule, and the  
14      inner cavity of the female coupler;  
15                    wherein the male coupler and female coupler are configured to couple to  
16      each other.

1        22. The apparatus of Claim 21, wherein the o-ring is positioned in a groove of  
2        the inner cavity of the female coupler to provide a seal between the outer ferrule, the  
3        inner ferrule, and the inner cavity of the female coupler.

1        23. The apparatus of Claim 22, wherein the inner ferrule is coupled to the  
2        female coupler by crimping a portion of the inner ferrule over a ridge located in the inner  
3        cavity of the female coupler such that the inner ferrule may swivel within the female  
4        coupler about the ridge.

1        24. The apparatus of Claim 23, wherein the male coupler and the female  
2        coupler may be coupled to each other by threading an external threaded portion of the  
3        male portion into internal threads of the female coupler.

1        25. The apparatus of Claim 24, wherein the male coupler has an inner cavity  
2 and is configured to attach to the first hose in the inner cavity by way of a second ferrule  
3 assembly, the second ferrule assembly comprising:

4                an outer ferrule positionable on an outside surface of the first hose  
5 proximate a first end of the first hose;

6                an inner ferrule positionable on an inside surface of the first hose and  
7 configured to couple with the outer ferrule proximate the first end of the first hose.

8                wherein the outer ferrule of the male coupler comprises undulations to  
9 couple the outer ferrule of the male coupler to the first hose;

10                wherein the inner ferrule of the male coupler comprises undulations to  
11 couple the inner ferrule of the male coupler to the first hose.

1        26. The apparatus of Claim 25, wherein the second ferrule assembly does not  
2 swivel with respect to the male coupler.

1        27. The apparatus of Claim 26, wherein the female coupler and the male  
2 coupler comprise generally oval shapes for an ergonomic grip.

1        28. The apparatus of Claim 27, wherein the male coupler is coupled to the first  
2 hose and the female coupler is coupled to the second hose.

1        29. The apparatus of Claim 21, wherein the male coupler is coupled to a first  
2 end of a hose and the female coupler is coupled to a second end of the hose.

1           30. A method of producing an apparatus for coupling ends of a first hose and a  
2 second hose together, comprising:

3                   providing a male coupler configured to attach to the first hose;  
4                   providing a female coupler having an inner cavity and being configured to  
5 attach to the second hose in the inner cavity by way of a first ferrule assembly; and  
6                   configuring the male coupler and the female coupler to couple to each  
7 other;

8                   wherein the first ferrule assembly comprises an outer ferrule positionable  
9 on an outside surface of the second hose proximate a first end of the second hose, and an  
10 inner ferrule positionable on an inside surface of the second hose and configured to  
11 rotatably couple with the female coupler so that the inner ferrule may swivel relative to  
12 the female coupler thereby enabling the female coupler to be swiveled about the second  
13 hose without rotating the second hose.

1           31. The method of Claim 30, further comprising coupling the inner ferrule to  
2 the female coupler by folding a portion of the inner ferrule over a ridge located in the  
3 inner cavity of the female coupler in a manner to allow the inner ferrule to swivel within  
4 the female coupler about the ridge.

1           32. The method of Claim 31, further comprising positioning an o-ring in a  
2 groove of the inner cavity of the female coupler to provide a seal between the outer  
3 ferrule, the inner ferrule, and the inner cavity of the female coupler.

1           33. The method of Claim 32, further comprising providing a first hose and a  
2 second hose.

1           34. The method of Claim 32, further comprising coupling the male coupler to  
2 a first end of a hose and coupling the female coupler to a second end of the hose.